# Land, Recreation, and Visual Quality Report

French Meadows Project

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# **Table of Contents**

1	Affected Environment1						
	1.1	Land M	Land Management1				
		1.1.1	TNF – LRMP	1			
		1.1.2	Sierra Nevada Forest Plan Amendments	2			
		1.1.3	Placer County General Plan	3			
		1.1.4	Specially Designated Areas	3			
	1.2	Recrea	ation Resources	4			
		1.2.1	Recreation Opportunities and Facilities	4			
		1.2.2	Dispersed Use	5			
		1.2.3	Trails	5			
		1.2.4	Roads and Off-Highway Vehicle Use	6			
		1.2.5	Over-Snow Vehicle Use	7			
	1.3	Visual	Resources	7			
2	Direct	Direct and Indirect Effects					
	2.1	Direct a	and Indirect Effects of Alternative 1	g			
		2.1.1	Land Management	g			
		2.1.2	Recreation Resources	10			
		2.1.3	Visual Resources	12			
	2.2	Direct and Indirect Effects of Alternative 2					
	2.3	Direct and Indirect Effects of Alternative 3					
	2.4	Cumulative Effects					
3	Refere	ences		14			
Δr	pendi	ices					
•	•						
App	endix 1	TNF LI	RMP Management Area Descriptions				
To	hloo						
Ιd	bles						
Tab	le 1.	Manag	gement Areas in the French Meadows Project Area	2			
Table 2.		Visual Quality Objectives					

# Acronyms

ARC American River Conservancy
ARRD American River Ranger District

CDFW California Department of Fish and Wildlife

CFR Code of Federal Regulations
EIS Environmental Impact Statement

ENF Eldorado National Forest

FS Forest Service

FSEIS Final Supplemental Environmental Impact Statement

IRA Inventoried Roadless Area

LRMP Land and Resource Management Plan

M Modification

MA Management Areas

MFP Middle Fork American River Project

msl mean sea level

MVUM Motor Vehicle Use Map
NFS National Forest System
NPS National Park System
NRI National Rivers Inventory

OHV Off-Highway Vehicle

OSVUM Over-Snow Vehicle Use Map

P Preservation

PCWA Placer County Water Agency

PR Partial Retention

R Retention

RARE Roadless Area Review and Evaluation

RN Roaded Natural
ROD Record of Decision

ROS Recreation Opportunity Spectrum

SNFPA Sierra Nevada Forest Plan Amendment

TCT Tevis Cup Trail

TNF Tahoe National Forest

US United States

USDA-FS United States Department of Agriculture – Forest Service

VQO Visual Quality Objectives
W&SR Wild and Scenic River
WST Western States Trail

WSTF Western States Trail Foundation

## 1 Affected Environment

The area to be treated as part of the French Meadows Project is located primarily within the Middle Fork American River Watershed, in the immediate vicinity of French Meadows Reservoir, and to a lesser extent along Dolly Creek, a tributary to the Middle Fork American River. Elevations in the Project Area range from approximately 5,260 feet above mean sea level (msl) at French Meadows Reservoir to approximately 7,000 feet above msl along the surrounding ridges.

The Project Area is relatively remote and there are no residential or commercial developments in either watershed. The nearest population center is the community of Foresthill, with a population of 1,483 based on 2010 census data (US Census Bureau 2018). Foresthill is located approximately 35 road miles southwest of French Meadows Dam (also known as L.L. Anderson Dam).

From Foresthill, the Project Area is accessible via Mosquito Ridge Road (also known as Forest Road [FR]-96), the primary access route to and through the Project Area. Alternatively, the Project Area can be reached from Georgetown via FR-2 to FR-96. Access to the more remote locations in the Project Area is possible using ancillary paved and unpaved roads and trails that are part of the Tahoe National Forest (TNF) transportation system.

## 1.1 Land Management

The Project Area is comprised primarily of private land owned by American River Conservancy (ARC) and public land managed by the TNF. Placer County Water Agency (PCWA) owns and operates French Meadows Dam (also known as L.L. Anderson Dam), French Meadows Reservoir and associated hydroelectric infrastructure, but these facilities occupy National Forest System (NFS) land managed by the TNF.

All activities that occur on land managed by the TNF, including those associated with the Proposed Action, must conform with the direction contained in the TNF Land and Resource Management Plan (LRMP) (USDA-FS 1990), as amended by the Sierra Nevada Forest Plan Amendment (SNFPA), Final Supplemental Environmental Impact Statement (FSEIS), and Record of Decision (ROD) (USDA-FS 2001, USDA-FS 2004). Private land holdings in the Project Area are generally subject to the provisions contained in the Placer County General Plan (Placer County 1994). Pertinent management plans are briefly described in the following.

## 1.1.1 <u>TNF – LRMP</u>

TNF-LRMP provides direction for long-term land management in the TNF. The TNF-LRMP goals are to: (1) ensure wise use and protection of TNF resources; (2) fulfill legislative requirements; and (3) address local, regional, and national issues. The TNF-LRMP contains standards and guidelines that allow for timber and fuels management while protecting natural resources and meeting area-specific management objectives. Note that management direction regarding certain resources, for example timber and wildlife, have been revised as part of the SNFPA (USDA-FS 2001 and USDA-FS 2004).

Land within the TNF is divided into 109 Management Areas (MAs). The Project Area overlaps five of these: MA# 080 – Granite Chief; MA# 083 – Wabena Steamboat; MA# 089 – French; MA# 090 – Divide; and MA# 091 – Sunflower. Detailed descriptions of these five MAs (extracted from the LRMP) are provided in Appendix 1 for reference. The Management Prescription and Recreation Opportunity Spectrum (ROS) for these five management areas as identified in the LRMP are summarized in Table 1.

Table 1.	Management Areas in the French Meadows Project Area
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MA#	Management Area Name	Management Prescription	ROS
080	Granite Chief	Wilderness	Primitive
083	Wabena Steamboat	Timber and Range	Roaded Natural
089	French	Reservoir	Rural for developed sites. Roaded natural for all other areas.
090	Divide	Visual	Roaded natural
091	Sunflower	Timber and Range	Roaded natural

The areas to be treated in the Project Area are limited to the Wabena Steamboat, French, Divide and Sunflower MAs, where the ROS is classified as Roaded Natural (RN), except in developed sites (e.g. recreation facilities), where the ROS classification is Rural (R). Areas within the Granite Chief MA will not be treated but a short, approximately one-mile long trail segment will be constructed within the Granite Chief MA. The Primitive, Roaded Natural and Rural ROS classifications are defined by the Forest Service (USDA-FS 1990 pp. V-21) as follows:

- > **Primitive (P):** Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other uses is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is note permitted.
- > **Roaded Natural (RN):** Area is characterized by a predominantly natural-appearing environment with moderate evidence of the sights and sounds other humans. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate but with evidence of other users prevalent. Resource modification and utilization practices are evident but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.
- > **Rural (R):** Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available.

The TNF will use these ROS classifications to help guide decisions regarding the Proposed Action to ensure that recreation opportunities and experiences are maintained consistent with the ROS classifications.

## 1.1.2 <u>Sierra Nevada Forest Plan Amendments</u>

The 2001 and 2004 SNFPAs augment the TNF-LRMP. Appendix A of the 2004 SNFPA FSEIS – ROD, identifies the management direction for all National Forests within the Sierra Nevada bioregion, including in the TNF. The ROD sets forth the management goals and strategies for five problem areas including: (1) old forest ecosystems and associated species; (2) aquatic, riparian and meadow ecosystems and associated species; (3) fire and fuels management; (4) lower west side hardwood ecosystems; and (5) noxious weed management. The ROD describes in detail the management standards and guidelines relevant to these five resource topics.

## 1.1.3 Placer County General Plan

Activities on private land within Placer County are subject to the provisions contained in the Placer County General Plan, which was adopted in 1994 and updated in 2013. The Placer County General Plan provides goals, policies, and implementation programs in the following areas: land use, housing, transportation and circulation, public facilities and services, recreational and cultural resources, natural resources, agricultural and forestry resources, health and safety, and noise.

The Placer County General Plan identifies five land uses in Middle Fork American River Watershed including Agriculture, Resource Protection, Rural Residential, Timberland, and Urban uses. The Project Area occupies land designated as "Timberland." This designation is applied to mountainous areas where the primary land uses relate to the growing and harvesting of timber and other forest products (together with limited, low-intensity public and commercial recreational uses). Necessary public utility facilities (e.g. the MFP hydroelectric facilities and recreation facilities) are allowed uses on lands designated as Timberland.

#### 1.1.4 Specially Designated Areas

Four specially designated areas are located in the immediate vicinity of the Project: Granite Chief Wilderness; Granite Chief and Duncan Canyon Inventoried Roadless Areas (IRAs); and the French Meadows State Game Refuge.

- > **Granite Chief Wilderness Area.** A portion of the Project Area overlaps Granite Chief Wilderness, which is managed by the TNF. The Granite Chief Wilderness was designated a Wilderness area in 1984 and was expanded in 2017 when the American River Conservancy (ARC) donated 3,347 acres of land to the TNF. This Wilderness area is located in the uppermost portion of the Middle Fork American River Watershed and is characterized by exposed granite cliffs and bedrock, glacier-carved valleys, forest, and meadows. Numerous trails cross the Granite Chief Wilderness, including the Pacific Trail and the Western States Trail (WST). The extensive trail system is used by hikers and equestrians. Most recreation use in the Granite Chief Wilderness originates from Lake Tahoe basin to the east (Wilderness.net 2017).
- Duncan Canyon and Granite Chief IRAs. Portions of the Project Area overlap two IRAs, the Granite Chief IRA and the Duncan Canyon IRA. IRAs refer to specific areas that were identified and mapped in accordance with the Roadless Area Conservation Final Rule, also known as the '2001 Roadless Rule" (USDA-FS 2001). The 2001 Roadless Rule defines an IRA as "undeveloped areas typically exceeding 5,000 acres that met the minimum criteria for wilderness consideration under the Wilderness Act and that were inventoried during the Forest Service's Roadless Area Review and Evaluation (RARE II) process, subsequent assessments, or forest planning." The 2001 Roadless Rule further defines IRAs as "Areas identified in a set of inventoried roadless area maps, contained in Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2, dated November 2000, which are held at the National headquarters office of the Forest Service, or any subsequent update or revision of those maps." The TNF IRAs map depicts the boundaries of the Granite Chief and Duncan Canyon IRAs. Although road construction or reconstruction is not proposed within the portions of the Project Area that overlap the Granite Chief and Duncan Canyon IRAs, the TNF IRA map indicates road construction and reconstruction is allowed within all of the Project Area that coincides with these two IRAs.
- > **State Game Refuge.** A portion of the Project Area is located within a California State Game Refuge. The refuge boundaries extend, roughly, from the west end of French Meadows Reservoir to the northwest portion of the Granite Chief Wilderness. The designation is intended primarily to protect habitat used by the Blue Canyon mule deer herd. The State Game Refuge is managed by the California Department of Fish and Wildlife (formerly the California Department of Fish and Game).

There are no Research Natural Areas or Special Interest Areas within the Project Area. In addition, the Project Area does not encompass any rivers or streams that are protected under the National Wild and Scenic River (W&SR) Act or under the California W&SR Act and none of the rivers or streams located within the Project Area are included on the National Park System (NPS) National Rivers Inventory (NRI). The Rubicon River, a major tributary to the Middle Fork American River, is designated as a California State Wild Trout Stream. The Rubicon River will not be affected by the Proposed Action.

#### 1.2 Recreation Resources

Recreation use in the Project area is concentrated around French Meadows Reservoir, which is owned and operated by PCWA as part of the Middle Fork American River Project (MFP), a multi-purpose hydroelectric and water supply project. With a gross storage capacity of 134,993 acre feet and a surface area of 1,433 acres at maximum pool, French Meadows Reservoir is the largest reservoir on the Middle Fork American River. Although relatively remote and time-consuming to access, the French Meadows Reservoir area is a popular recreation destination. Most recreation use occurs between Memorial Day and Labor Day, with the heaviest use occurring on weekends and holidays. Fishing and hunting are popular during the spring and fall shoulder seasons, respectively, although hunting is prohibited in the immediate vicinity of French Meadows reservoir due to its location within a State Game Refuge. Relatively little use occurs during the winter, when snow and impassible road conditions typically impede access by all but over-the-snow vehicles (PCWA 2010a).

#### 1.2.1 Recreation Opportunities and Facilities

French Meadows Reservoir provides an array of recreation opportunities including fishing, camping, boating, hiking, picnicking, and sight-seeing. These opportunities are supported by a variety of developed recreation facilities, all located within the Project Area, as follows:

- > Ahart Campground
- > French Meadows Campground
- > Lewis Campground
- > Poppy Campground
- > Covote Group Campground
- Sates Group Campground
- > Talbot Campground
- > French Meadows Boat Ramp
- > McGuire Boat Ramp
- > McGuire Picnic Area (planned for conversion to two group campsites)
- > Duncan Diversion Primitive Campsite

Most of the developed recreation facilities are located in the immediate vicinity of French Meadows Reservoir. Ahart and Talbot campgrounds are located on the Middle Fork American River, upstream of French Meadows Campground. French Meadows and McGuire boat ramps provide the primary access to the reservoir. These boat ramps are located near French Meadows and McGuire Picnic Areas, which provide day use opportunities near the reservoir.

## 1.2.2 Dispersed Use

Dispersed recreation use occurs throughout the Project area, but is concentrated around French Meadows reservoir and the Middle Fork American River, where roads and trails facilitate access. Based on studies conducted by PCWA between 2008 and 2010, dispersed use in the Project area is concentrated in the following locations:

- > Area near bridge over the Middle Fork American River, upstream of French Meadows Reservoir
- > Area on south shore of French Meadows Reservoir, near French Meadows Hell Hole Tunnel Gatehouse
- > Area immediately downstream of French Meadows Dam (both sides of river)
- > Area located immediately northwest of French Meadows Dam

Dispersed recreation activities that occur in the Project area primarily include camping, recreational mining (i.e. gold panning), hiking, mountain biking, and horseback riding. Dispersed camping is allowed in most areas across the TNF. However, camping in the French Meadows Reservoir area is permitted only within the developed campgrounds. The USDA-FS restricts overnight camping in undeveloped areas around the reservoir for resource protection (PCWA 2010b). Hunting is not allowed in the immediate vicinity of French Meadows Reservoir because it lies within the boundaries of a State Game Refuge (USDA-FS 2018).

#### 1.2.3 Trails

Several trails are located within the Project Area, including the Western States Trail (WST), Tevis Cup Trail (TCT), the Poppy/McGuire Trail (which is a segment of the WST), and the Talbot Creek Trail. These trails are briefly described in the following.

Western States Trail (WST). The Western States Trail (WST) crosses the Project Area. The WST originated as a Native American track, and in the mid-1800s was used by early settlers and gold miners as the principal foot and pack stock route between the silver fields of Nevada and the gold fields of California. The WST has retained its single track character and looks very much the same as it did in the 1800s. It remains the most intact historic trans-Sierra crossing, unaffected by the presence of roads or railroads (Placer County 2007). In California, the WST generally extends from Squaw Valley to Folsom Reservoir, where it adjoins the Pioneer Express Trail and continues on to Sacramento.

Within the Project area, from east to west, the WST (16E10) crosses the Granite Chief Wilderness, paralleling the north side of the Middle Fork American River. After existing the Wilderness Area, the WST follows Forest Road 96 (FR 96) towards French Meadows Reservoir, coinciding with FR 96 from Talbot Campground to the McGuire Boat Ramp Parking Area. From the parking area, the WST continues westward, following the north shore of French Meadows reservoir, towards French Meadows Dam (also referred to as LL Anderson Dam). From the dam, the WST turns northward, intersecting the Tevis Cup Trail (16E04) described below.

> **Tevis Cup Trail (TCT).** The TCT (16E04) bisects the north east corner of the Project area, crossing through the Granite Chief Wilderness, and continuing along the Red Star Ridge, which forms the northern boundary of the Project Area. Just northwest of French Meadows Dam, the TCT intersects the WST and the WST continues northward from there.

The portion of the TCT that runs along Red Star Ridge (16E04) is part of the route that is used for the Western States 100 Endurance Run, a world-class endurance race. The WST 100 race is sponsored by the Western States Endurance Run Foundation and always occurs on the last weekend of June. The race begins at Squaw Valley at 5:00 AM and runners must reach the finish line in Auburn no later

than 11:00 AM the following day. This race has been held annually for over 40 years and draws participants from all over the world.

The TCT segment that crosses through the Project Area intersects the route that is used for the Tevis Cup Equestrian Endurance Ride, a 100-mile long endurance race that has been held annually for the past 60 years. Despite its name, the portion of the TCT that crosses through the Project area, is not used for the Tevis Cup Equestrian Endurance Ride.

McGuire Trail/Poppy Trail. The section of the WST that parallels the north shore of French Meadows Reservoir is also referred to as the Poppy Trail and/or the McGuire Trail. The Poppy Trail is approximately 0.7 mile long and extends from the McGuire Boat Ramp Parking Area to Poppy Campground, a hike-in/boat in campground. The McGuire Trail extends from Poppy Campground to the French Meadows Dam. Both the Poppy Trail and the McGuire Trail are poorly maintained, substantially overgrown, and difficult to navigate.

The Proposed Action includes the construction of a new trail segment along the south shore of French Meadows Reservoir. This trail will tie into the McGuire Trail/Poppy Trail section of the WST, on the north shore of the reservoir to create a continuous loop trail around the reservoir, crossing French Meadows Dam via FR-96 on the west end of the reservoir, and crossing the Middle Fork American River via the FR-96 bridge crossing located upstream of French Meadows Reservoir. Excluding segments that coincide with FR-96, the trail will be marked with signage prohibiting motorized use, consistent with TNF management direction.

> **Talbot Creek Trail.** This two-mile long trail is located in the Granite Chief Wilderness and follows Talbot Creek to the TCT (16E04) described above. The Proposed Action includes a proposal to construct a one-mile long, 18 to 24-inch wide sustainably designed non-motorized trail that would connect the existing Talbot Trailhead to the Talbot Creek Trail, and would also tie into the existing WST. The addition of the new trail segment would tie together the TCT, the WST and the Talbot Creek trail, creating a loop trail within the northwest section of the Granite Chief Wilderness.

## 1.2.4 Roads and Off-Highway Vehicle Use

Road use in the Project Area, including off-Highway Vehicle (OHV) use, is managed by the TNF. All roads in the Project Area that are open to motorized use are shown on the TNF-American River Ranger District (ARRD) Motor Vehicle Use Map (MVUM), which also displays uses allowed by vehicle class (highway-legal vehicles, vehicles less than 50 inches wide and motorcycles) and seasonal allowances. Routes not shown on the MVUM are not open to public motor vehicle travel.

With two exceptions, all roads of the roads shown on the MVUM and located within the Project Area are open to all vehicles, subject to seasonal use restrictions. The exceptions include: (1) FR 96, which is only open to highway legal vehicles; (2) the TCT (16E04), which follows the northern boundary of the Project Area; and (3) the portion of the WST (16E10) that extends northward from near the TCT. According to the MVUM, 16E04 and 16E10 are only open to motorcycles from April 1<sup>st</sup> to December 1<sup>st</sup>.

For resource protection, a number of roads located within the Project Area will be decommissioned or closed as part of the Proposed Action. In addition, French Meadows North Shore Road (Road 0042-002) and the Dolly Creek Water System Access Road will be realigned or repaired as part of the Proposed Action. The French Meadows North Shore Road (0042-002) provides the main access to the recreation facilities located on the north side of French Meadows Reservoir. The Dolly Creek Water System is the main water supply for the developed recreation facilities located on the east end and north shores of French Meadows Reservoir. Maps showing the locations of the roads that will be addressed as part of the Proposed Action are provided in Appendix A of the Environmental Assessment (EA).

## 1.2.5 Over-Snow Vehicle Use

The developed recreation facilities in the Project Area are closed during the winter and there are no winter support facilities (e.g. snow-mobile staging areas, snow parks) located within the Project Area. In addition, the primary road through the Project Area (FR 96) is not regularly plowed. Therefore, winter use is generally very low compared to summer use. Winter use in the Project Area is primarily limited to oversnow vehicle use, subject to TNF use restrictions, which are shown on the TNF Over-Snow Vehicle Use Map (OSVUM). According to the OSVUM, the entire Project area is open to over-snow vehicle use, without seasonal restrictions. The portion of FR-96 that crosses through the Project Area is groomed and marked as a snowmobile trail by the TNF.

#### 1.3 Visual Resources

The landscape in the Project Area and surrounding French Meadows Reservoir is characterized by moderately steep hillsides, which are densely vegetated with mixed conifer forest, interspersed with small areas dominated by white fir and huckleberry oak. Upper montane chaparral species are also present on the surrounding side slopes. The reservoir and surrounding side slopes include intermittent exposure of granitic bedrock and willow species occur alongside drainages. In 2001, the Star Fire consumed 17,500 acres of forest in the TNF and adjacent Eldorado National Forest (ENF). This fire burned in the immediate vicinity of the French Meadows Reservoir, destroying many of the trees and vegetation, altering the visual character of the landscape in the Project Area, particularly to the north, west, and southwest of L.L. Anderson Dam where large barren areas of exposed soil and bedrock and the remnants of burned trees are still present.

Visual resources on National Forest System lands are managed to meet specific Visual Quality Objectives (VQOs) that are identified in the forest-specific LRMPs. The VQOs identified in the LRMP represent the Forest's management direction throughout the life of the plan and are used by the Forest to evaluate the consistency of proposed actions with Forest management direction. VQOs are established to assure that visitors are afforded views of natural looking landscapes when seen from certain roads, trails, water bodies (streams, lakes, and reservoirs) and developed recreational use areas where public use is concentrated. Four different VQOs are used on the TNF: Preservation (P), Retention (R), Partial Retention (PR), and Modification (M). These VQOs are defined as follows:

- Preservation (P) The Preservation VQO designation allows for ecological changes only. Management activities, except for very low visual impact recreation facilities are prohibited. The objective applies to Wilderness Areas, primitive areas, other special classified areas, areas awaiting classification and some unique management units that do not justify special classification (USDA-FS 1974). No proposed treatment units are proposed within areas with a P VQO.
- Retention (R) The Retention (R) VQO provides for management activities that are not visually evident. Under Retention, activities may only repeat form, line, color, and texture which are frequently found in the characteristic landscape. Changes in their qualities of size, amount, intensity, direction, pattern, etc., should not be evident (USDA-FS 1974).
- > **Partial Retention (PR)** Under the Partial Retention (PR) VQO, management activities are to remain visually subordinate to the characteristic landscape. Activities may repeat form, line, color, or texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinate to the characteristic landscape. Activities may also introduce form, line, color, or texture, which are found infrequently or not at all in the characteristic landscape, but they should remain visually subordinate to the visual strength of the characteristic landscape (USDA-FS 1974).

> **Modification (M)** – Under the modification (M) VQO, management activities may visually dominate the original characteristic landscape. However, activities of vegetative and land form alterations must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area or character type. Additional parts of these activities such as structures, roads, slash, root wads, etc., must remain visually subordinate to the proposed composition. Activities which are predominantly introduction of facilities such as buildings, signs, roads, etc., should borrow naturally established form, line, color, and texture so completely and at such a scale that its visual characteristics are compatible with the natural surroundings (USDA-FS 1974).

The VQOs for the five MAs in the Project Area are identified in the TNF LRMP (USDA-FS 1990), and summarized below.

Table 2. Visual Quality Objectives

340.4	MA Nama	V00		
MA#	MA Name	VQO		
080	Granite Chief	Preservation (P)		
	Wabena Steamboat	R in foreground along the WST.		
		PR in middle ground as viewed from French Meadows Reservoir		
083		<ul> <li>PR in middle ground viewed from FR 96 from the south shore of French Meadows Reservoir to the junction with Road 51.</li> </ul>		
003		<ul> <li>PR in middle ground as viewed from Road 51 from junction of FR-96 to Talbot Campground turn off.</li> </ul>		
		PR in immediate foreground as viewed from the Tevis Cup Trail.		
		M for all other area within the Project boundary.		
		R in foreground from the following viewpoints:		
	French	<ul><li>WST, Middle Fork American River;</li></ul>		
		<ul><li>FR-96 to junction of road 51;</li></ul>		
089		<ul> <li>Road 51 to Talbot Campground;</li> </ul>		
		<ul><li>campgrounds viewing <u>out</u></li></ul>		
		PR within developed sites		
		<ul> <li>PR when developed sites are viewed as middle ground from travel routes and other occupancy sites.</li> </ul>		
090	Divide	PR in the small section of this MA that intersects the Project Area		
	Sunflower	<ul> <li>R in foreground as viewed from the WST between Robison Flat and junction with Duncan Creek.</li> </ul>		
091		<ul> <li>PR in immediate foreground as viewed from the WST from the junction with Duncan Creek to the boundary with MA 089.</li> </ul>		
		PR for the foreground as viewed from the Tevis Cup trail.		
		M for all other areas within the Project boundary.		

As indicated, the VQOs vary depending on vantage point, reflecting use levels and viewer sensitivity to the landscape. Management activities associated with the Proposed Action must be consistent with the VQOs identified above.

# **Direct and Indirect Effects**

This section discusses potential direct and indirect effects to land management, recreation resources, and visual resources associated with each of the alternatives under consideration.

#### 2.1 Direct and Indirect Effects of Alternative 1

Under Alternative 1, approximately 12,183 acres of forested area would be treated using a combination of ground based mechanical thinning, mastication, hand thinning, and prescribed fire. In addition, a number of road and trail modifications are proposed as follows: (1) approximately 76.6 miles of roads would be reconditioned as needed prior to, during, and following implementation of the Project; (2) approximately 4.5 miles of short roads or segments of 13 roads would be decommissioned and removed from the FS transportation system; (3) approximately 0.6 mile of FR 51 would be closed to public wheeled motor vehicle travel; (4) approximately 0.3 mile of FR 0068-010 would be closed to public wheeled motor vehicle travel; (5) an approximately 1-mile long trail would be constructed, extending from the existing Talbot Trailhead to the existing 2-mile long Talbot Creek Trail; and (6) a non-motorized trail would be constructed on the south side of French Meadows Reservoir. This trail would tie into the existing WST on the north side of the reservoir (also known as the McGuire Trail/Poppy Trail), resulting in a loop trail around the reservoir. In addition, the installation of small devices are proposed as part of a water research study.

#### 2.1.1 **Land Management**

The land management activities associated with Alternative 1 are consistent with the resource management emphasis, standards, and guidelines, and management practices for the MAs identified in the TNF LRMP. In addition, the activities associated with Alternative 1 are consistent with the management direction contained in the SNFPA, the Placer County General Plan, and the 2001 Roadless Rule (USDA-FS 2001). Therefore, implementation of Alternative 1 will not result in direct or indirect impacts related to the management plans that pertain to the Project Area.

With the exception of recreation facilities, all of the areas to be treated under Alternative 1 are designated in the TNF LRMP as Roaded Natural (RN), which specifically allows resource modifications and practices that are evident but harmonize with the natural environment. The recreation facilities located in the Project Area are designated in the TNF LRMP as Rural (R), which allows for resource modifications and utilization practices that are designed to enhance recreation and to maintain vegetative cover and soils. The treatments proposed under Alternative 1, along with the associated management requirements, are consistent with these designations, and therefore will not result in direct or indirect impacts related to the ROS designations.

A portion of the Project Area is located within the Granite Chief Wilderness Area. However, with the exception of constructing a 1-mile long trail segment to connect the existing Talbot Trailhead to the existing Talbot Creek Trail, Alternative 1 does not include any activities within the boundaries of the Wilderness Area. Consistent with management direction for wilderness areas, the new trail segment will not include improvements or features that conflict with the preservation ROS designation, such as handrails or landings. In addition, the trail will be constructed with hand tools. Therefore, construction of a 1-mile long segment of trail in the Granite Chief Wilderness will not result in direct or indirect impacts related to the wilderness area designation.

The Project Area is located within a State Game Refuge, which is primarily managed by the CDFW to protect habitat used by the Blue Canyon mule deer herd. The activities proposed under Alternative 1 will not adversely affect the State Game Refuge or Blue Canyon mule deer habitat (see Biological Evaluation for the French Meadows Project). Conversely, implementation of Alternative 1 will enhance Blue Canyon

mule deer herd habitat by reducing fuel loads and reducing the risk of catastrophic wildfire within the game refuge.

A portion of the Project area overlaps portions two IRAs, the Granite Chief IRA and the Duncan Canyon IRA. No Project-related activity is proposed within the boundaries of the Granite Chief IRA. Therefore, the Proposed Action will have no effect on the Granite Chief IRA. Project-related activities within the Duncan Canyon IRA will be limited to prescribed burning. The intent of the 2001 Roadless Rule is to: "provide lasting protection for inventoried roadless areas within the National Forest System in the context of multiple-use management" (see FR Vol 66, No. 9, Page 3244). Furthermore, the 2001 Roadless Rule allows for management activities that are intended to improve ecosystem composition and structure and to reduce the risk of catastrophic wildfire, as follows:

Forest health treatments for the purposes of improving threatened, endangered, proposed, or sensitive species habitat or maintaining or restoring the characteristics of ecosystem composition and structure, such as reducing the risk of uncharacteristic wildfire effects, will be allowed where access can be gained through existing roads or by equipment not requiring roads (see FR Vol 66, No. 9 Page 3250).

No new roads will be constructed or reconstructed within the Duncan Canyon IRA as part of the Proposed Action. In addition, the activities that will be undertaken within the Duncan Canvon IRA under Alternative 1 are consistent with the intent of the 2001 Roadless Rule and with the specific direction contained in the 2001 Roadless Rule regarding forest health treatments. Therefore, implementation of Alternative 1 will not result in direct or indirect impacts related to the IRA designation.

#### 2.1.2 **Recreation Resources**

Implementation of Alternative 1 will provide a variety of benefits to recreation visitors in the French Meadows Reservoir area. Specifically:

- The development of a loop trail around French Meadows Reservoir will provide non-motorized recreation opportunities in the immediate vicinity of French Meadows Reservoir that are not currently available;
- Developing a loop trail by connecting segments of WST, the TCT, and the Talbot Trail will provide an additional trail opportunity within the Granite Chief Wilderness that is not currently available;
- Reducing fuel loads and hazard trees within and around the developed recreation facilities will reduce the risk of wildfires and safety issues associated with hazard trees;
- Reducing fuel loads and hazard trees along the roadways in the Project Area will reduce wildfire risk and road closures due to fallen trees;
- Reducing fuel loads and hazard trees within the Project area will reduce wildfire risk associated with dispersed use, which occurs throughout the Project area;
- Reducing fuel loads and hazard trees along the Tevis Cup Trail (16E04) and the portions of the WST (16E10) would reduce wildfire risk associated use along these trails;
- Reconditioning over 76 miles of existing roads will provide easier and safer travel routes for recreation visitors, while reducing resource damage;
- Improving the French Meadows North Shore Road (0042-002) will ensure that road is maintained according to Forest Service standards for passenger vehicles, and that recreation visitors will continue to be able to easily access the recreation facilities located on the north shore of French Meadows Reservoir; and

Improving access to the Dolly Creek Water Supply, the main source of water for the developed recreation facilities on the east and north shores of French Meadows Reservoir, will help ensure that the water supply can be properly maintained and available to recreation visitors on a consistent basis.

The aforementioned benefits generally offset any potential impacts associated with the Proposed Project, which are summarized in the following.

Alternative 1 includes the removal or closure of approximately 5.4 miles of existing roads that are no longer maintained or appropriate for motorized travel. The roads to be removed or closed are short segments that are not necessary to access any of the developed recreation facilities in the French Meadows Reservoir area. Therefore, the removal and/or closure of 5.4 miles will not have any direct or indirect adverse effects on recreation visitors or recreation opportunities associated with the developed recreation facilities.

The Proposed Action includes the installation of various instruments to evaluate forest management practices on hydrology. These instruments are generally wireless, small devices that, for security purposes, will be installed in areas that are not generally noticeable to the general public. Therefore, the installation of the small devices that are proposed as part of the water research study will not directly or indirectly affect recreation visitors.

Implementation of Alternative 1 will result in increased truck traffic, noise, and dust along the primary travel corridor (FR-96), the secondary roads that are used to access each of the treatment areas, and within and around the developed recreation facilities. However, increased traffic and noise levels will be short term and temporary, and offset by the overall benefits of the Project.

Other indirect effects on the recreation users may include temporary closures to recreation sites. Temporary visual disturbances and closure of campsites are expected during implementation. These effects may discourage recreational use by creating unexpected inconveniences from large vehicles, dust, noise, or delays in travel. There may be some displacement of campers and day users to other Tahoe or Eldorado National Forest recreation sites. Other temporary effects may be smoke visible from prescribed burning in the project area. These effects are temporary in nature.

Temporary road and campground closures would be minimized, to reduce inconveniences to Forest users and passersby. Management requirements are designed to minimize the effects on Forest recreation users to the project area. Public education and signage would provide beneficial opportunities to educate recreation users on forest management, hazard tree safety, and future enhancement of the recreation sites.

In addition, the Proposed Action includes a number of measures that are specifically designed to minimize disruptions to recreation visitors, including for example: limited operating periods, required planning meetings; and procedures for disseminating information to the public so that recreation visitors can adjust the timing of their trips or activities accordingly. Implementation of these and the other recreation-specific measures included in the Proposed Action will minimize direct and indirect effects on recreation visitors, including those using developed recreation facilities located within the Project area and those participating in dispersed use activities.

Implementation of Alternative 1 will result in increased noise and dust along the WST, the TCT, and the Talbot Trailhead as trees are felled and removed along these trails. Hikers, bikers, and equestrian users may notice thinning and other activities, but since trail use is transient, these impacts will be limited to brief periods when the trail user is passing through the Project Area. The Proposed Action includes safety measures to preclude trail users from crossing through work areas when work is in progress. In addition, the Proposed Action includes measures that require coordination with the Tevis Cup and WST event organizers, and limiting operating periods, to ensure that the annual endurance races that occur on the WST and TCT are not adversely affected by the Project. Implementation of these and the other recreation-specific measures included in the Proposed Action will minimize direct and indirect effects to trail users.

Winter recreation use in the Project area is minimal, limited primarily to over-the-snow vehicle use along Mosquito Ridge Road (FR-96). In addition, the activities associated with the Proposed Action will not be implemented during the winter due to access constraints. Therefore, implementation of the Proposed Action will have no effect on winter recreation or over-the snow vehicle use.

#### 2.1.3 **Visual Resources**

The areas to be treated as part of the Proposed Action are located in areas with designated visual quality objectives (VQOs) of retention (R), partial retention (PR) or modification (M). The R VQO provides for management activities that are not visually evident. The PR VQO provides for management activities that that are visually subordinate to the characteristic landscape. Under the modification (M) VQO, management activities may visually dominate the original characteristic landscape, but vegetative and land form alterations must be consistent with the surrounding area or character type. Some of the treatments that will occur under the Proposed Action (i.e. prescribed burning, slash piles, and mastication) will temporarily degrade visual quality. However, visual quality will be restored as piles are removed and the treated landscape naturally rejuvenates. Therefore, implementation of the Proposed Action will not affect visual quality on a long term basis.

The Proposed Action includes the installation of two new gates on existing roads (to be painted green or brown to match other gates in the area) but no new structures or facilities will be constructed. The devices to be installed as part of the water research project are small and will be concealed for security purposes. and will therefore not be noticeable by the general public. Therefore, the installation of these features will not directly or indirectly effect visual quality.

All activities associated with the Proposed Action will be implemented so that the characteristic landscape is either maintained or improved. For example, all felled trees and slash piles will be removed from developed recreation areas. Hazard trees, dead limbs, and excessive brush will be removed throughout the Project Area, thereby improving currently limited and/or obscured views. Felled trees, limbs, and slash will be piled and burned. The presence of piles and smoke produced by burning the piles could affect visual quality, but the effect would be short term and temporary.

The Proposed Action includes measures to help ensure that visual quality is maintained, particularly in the vicinity of developed recreation facilities. For example, the edges of treatment units within view of recreation sites and French Meadows Reservoir will be horizontally feathered and naturally appearing (VR1) and nonactivity vegetation within recreation sites will be protected to the extent feasible (REC 8). Implementation of these and the other recreation-specific measures included in the Proposed Action will minimize adverse impacts to visual quality in the Project Area.

Overall, implementation of Alternative 1 will directly improve visual quality in the Project Area. Much of the Project Area, especially in the immediate vicinity of French Meadows Reservoir is covered by dense forest with hazardous fuel loads. In addition, hazard (dead or dying trees) are prolific. Removing excessive vegetation from the understory, removing hazard trees, and decreasing forest density will directly enhance visual quality by improving views from the developed recreation facilities, trails, and along designated travel corridors. In addition, it will improve visitor safety by increasing site distances along the roadways. Indirectly, visual quality will be protected on a long-term (>2 years) basis by reducing the chance of catastrophic wildfires that have the potential to devastate the landscape for decades.

#### 2.2 **Direct and Indirect Effects of Alternative 2**

Alternative 2 is the No Action Alternative. Under this alternative, with the exception of actions that have already been approved under other review processes (e.g. the closure of select roads for resource protection and select road and trail improvements), none of the actions under Alternative 1 would be implemented and none of the Project benefits described above would be realized. Under the No Action Alternative, land management activities would continue to be guided by the direction contained in the TNF LRMP, the SNFPA, and the Placer County General Plan, as they are now. As such, the No Action Alternative would have no effect on land management activities. However, under the No Action Alternative, visual quality would decline over time as forest density and the number of hazard trees increase, tainting, and obscuring views. A degradation in visual quality, in turn, would potentially degrade recreation visitor experience. A large, catastrophic wildfire is more likely to occur under the No Action Alternative than under either of the action alternatives. A large wildfire would directly impact land use, visual quality, and recreation opportunities in the vicinity of French Meadows Reservoir for decades.

#### 2.3 Direct and Indirect Effects of Alternative 3

Alternative 3 is similar to Alternative 1 except that the treatments have been modified to address California spotted owl Interim Recommendations. Under Alternative 3, approximately 12,119 acres of forested area would be treated using a combination of ground based mechanical thinning, mastication, hand thinning, and prescribed fire. In addition, approximately 76.8 miles of roads would be reconditioned as needed prior to, during, and following Project implementation. In general, Alternative 3 involves less mechanical thinning than Alternative 1, but more prescribed fire. The total amount of road miles to be reconditioned is nearly the same under both alternatives (76.6 miles under Alternative 1 and 76.8 miles under Alternative 3). The remaining actions involving roads and trails are the same under both Alternatives 1 and 3.

Except for the modifications to the treatment areas to address spotted owl habitat, Alternative 3 is almost identical to Alternative 1. Therefore, potential direct and indirect effects related to land management, recreation, and visual resources associated with Alternative 3 are the same as discussed under Alternative 1.

#### 2.4 **Cumulative Effects**

Recreation use in the French Meadows Reservoir area is projected to increase over time as the population of California grows. Implementation of both Alternatives 1 and 3 will create new trail opportunities and will improve recreation experience, visitor safety, and visual quality in the French Meadows Reservoir area and vicinity. When considered with respect to other foreseeable actions, implementation of Alternative 1 or 3 is not expected to result in any cumulative impacts to recreational or visual resources.

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French Meadows Project

APPENDIX

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TNF LRMP MANAGEMENT AREA DESCRIPTIONS